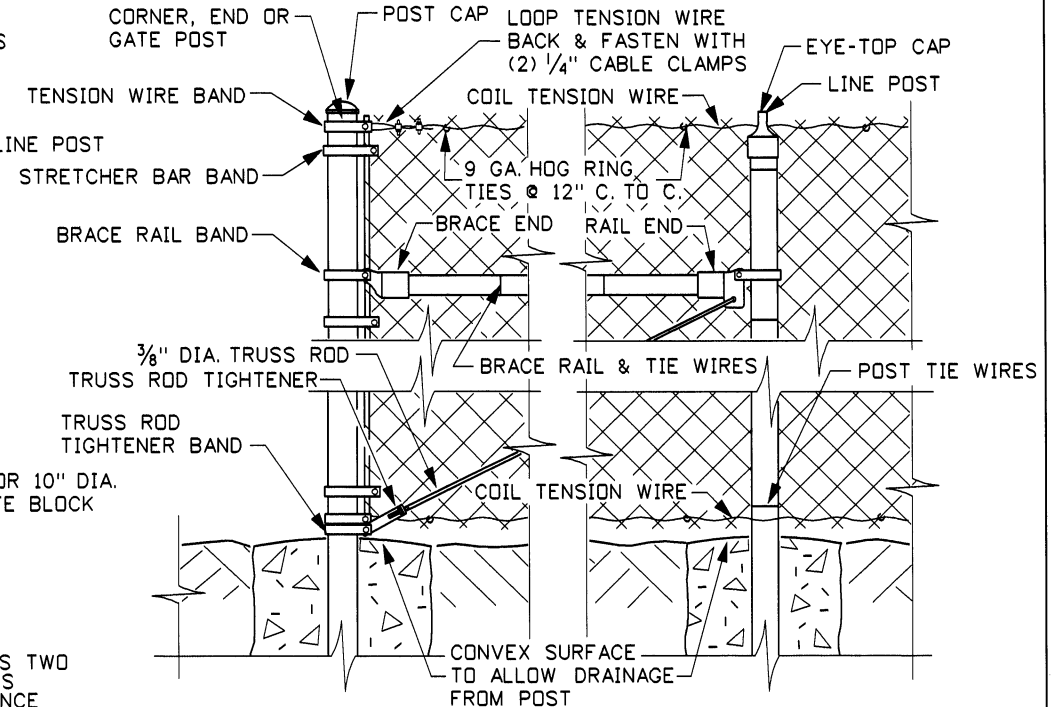
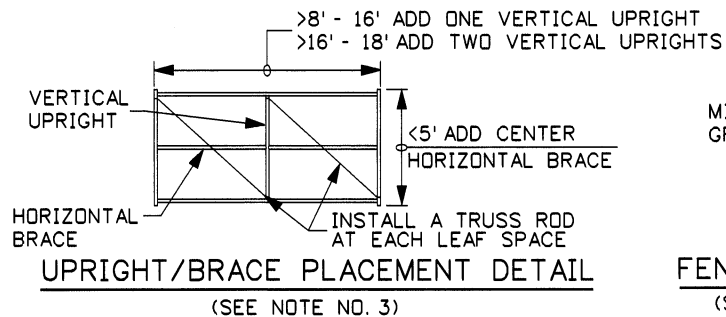
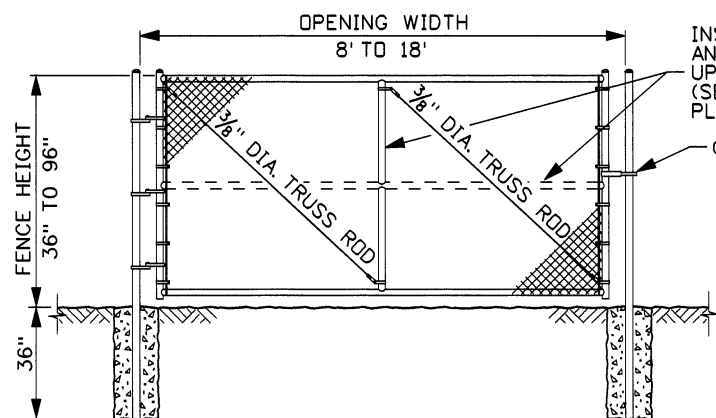
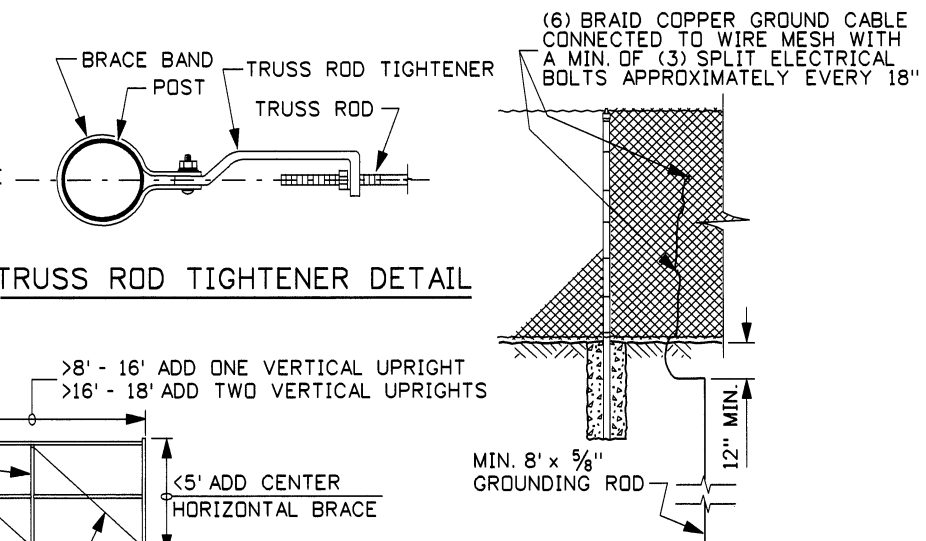
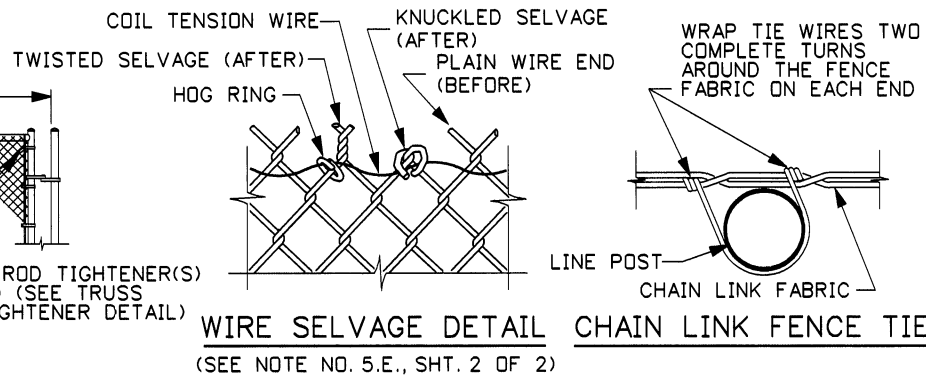
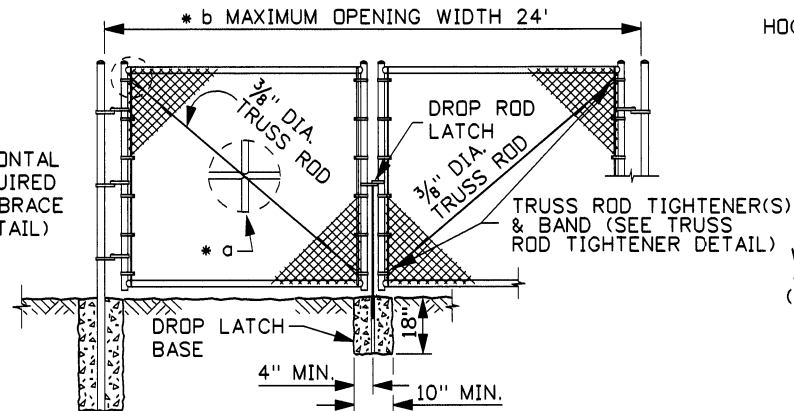
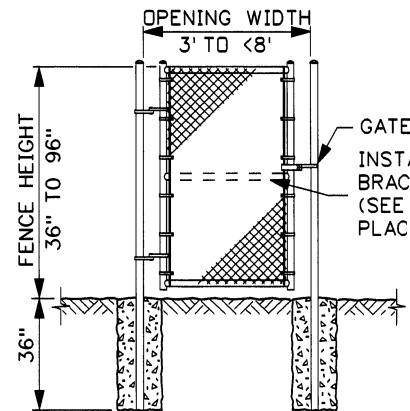


- \* a INSTALL HORIZONTAL BRACE & VERTICAL UPRIGHT(S) AS REQUIRED (SEE UPRIGHT/BRACE PLACEMENT DETAIL)
- \* b INSTALL TWO NARROW SINGLE OR TWO WIDE SINGLE LEAVES WITH DROP ROD FORK, GUIDE, & BASE (SEE NOTE NO. 4).



# NOTES

- ALL CONCRETE USED FOR CHAIN LINK FENCE POSTS SHALL BE CLASS 22.
- ALL TYPE 3 GATES SHALL BE SHOP WELDED AND ALL WELDS SHALL BE PAINTED WITH AN APPROVED ZINC RICH PAINT. THE TRUSS ROD TIGHTENER AND THE NON-TIGHTENING END OF THE TRUSS ROD MAY BE WELDED TO THE GATE.
- TYPE 3 GATES SHALL HAVE EXTRA VERTICAL UPRIGHT(S) AND A CENTERED HORIZONTAL BRACE WELDED PLACED ACCORDING TO THE "UPRIGHT/BRACE PLACEMENT DETAIL". THE VERTICAL UPRIGHT(S) SHALL BE EVENLY SPACED ON THE GATE LEAF AND EACH SPACE SHALL HAVE A TRUSS ROD.
- GATES ARE PAID FOR PER OPENING.
- ALL CHAIN LINK FENCE SHALL BE CONSTRUCTED TO SPECIFICATIONS AS DESCRIBED IN SECTION 708 - METALS, SUBSECTION 708.13 CHAIN LINK FENCE.
  - POSTS SHALL BE SPACED EQUAL DISTANCES APART, MAXIMUM SPACING SHALL BE 10' UNLESS DIRECTED BY THE ENGINEER.
  - THE POST CAPS SHALL BE SECURELY FASTENED TO THE POSTS.
  - BRACE RAILS AND TRUSS RODS SHALL BE SECURELY FASTENED TO POST WITH BRACE BANDS WITH THREADED TAKE-UP ON THE TRUSS RODS.
  - THE FENCE FABRIC SHALL BE STRETCHED SMOOTH AND BE UNIFORM IN APPEARANCE.
  - ALL THE PLAIN WIRE ENDS ON THE TOP AND BOTTOM OF THE CHAIN LINK FABRIC SHALL BE SELVAGED BY THE TWISTED OR KNUCKLED METHOD (SEE WIRE SELVAGE DETAIL).
  - ALL POSTS SHALL BE SET IN CONCRETE UNLESS OTHERWISE DIRECTED ON THE PLANS.
- THE POST TOP ELEVATIONS ARE TO BE ADJUSTED TO PROVIDE A SMOOTH VISUAL FENCE PROFILE. CORNER POSTS ARE TO BE INSTALLED AT HORIZONTAL BREAKS IN THE FENCE OF 15° OR MORE.
- THE DESIGN OF CHAIN LINK HARDWARE MAY VARY SOMEWHAT FROM THAT SHOWN IN THESE DRAWING DETAILS, HOWEVER ALL HARDWARE AND MATERIALS USED ON A SINGLE INSTALLATION SHALL BE UNIFORM AND COMPATIBLE.

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	1-97	MSM					
2	12-01	MSM					
3	1-04	MSM					
4	10-04	MSM					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

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DRWG. ORIG. DATE: DECEMBER, 1993

**IDAHO TRANSPORTATION DEPARTMENT**

BOISE IDAHO



*Steve C. Hutchinson*  
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)

*Jim S. [Signature]*  
CHIEF ENGINEER

STANDARD DRAWING

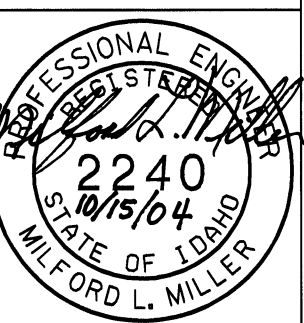
**CHAIN LINK FENCE FENCE TYPE 4**













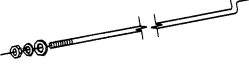






REQUIRES SHEET 2 OF 2

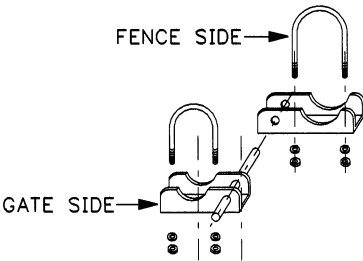
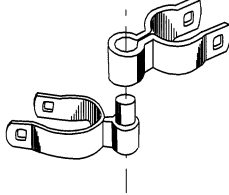
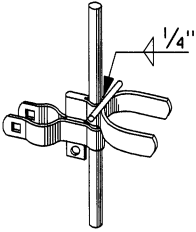
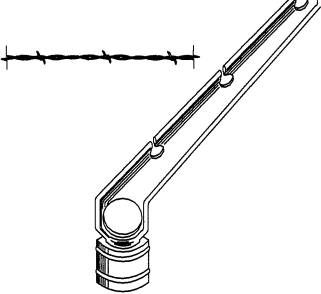
**English**

STANDARD DRWG. NO. **F-2-D**

SHEET 1 OF 2



HARDWARE ITEM DESCRIPTION		STANDARD REQUIREMENTS
BRACE POST		(SEE NOTE NO. 5)
CORNER, END AND GATE POSTS		(SEE NOTE NO. 5)
LINE POST (INTERMEDIATE POST)		(SEE NOTE NO. 5)
POST CAP		CAST NON-FERROUS ALLOY OR GALVANIZED PRESSED STEEL CAP MUST FIT SNUGLY ON POST AND GATE TOP
EYE-TOP CAP		GALVANIZED PRESSED STEEL MIN. 3/32" THICKNESS OR GALVANIZED MALLEABLE FERROUS ALLOY
STRECHER BAR BAND		CLASS 1 - MIN. 1/8" x 3/4" MIN. GALVANIZED STEEL CLASS 2 - MIN. 3/32" x 5/16" MIN. GALVANIZED STEEL
TENSION WIRE/BRACE BAND		CLASS 1 - MIN. 1/8" x 3/4" MIN. GALVANIZED STEEL CLASS 2 - MIN. 3/32" x 5/16" MIN. GALVANIZED STEEL
BAND BOLT		CLASS 1 - 5/16" DIA. x 1 3/4" GALV. CARRIAGE BOLT CLASS 2 - 3/8" DIA. x 1 1/4" GALV. CARRIAGE BOLT, (LOCK WASHER & FLAT WASHER FOR EACH BAND)
BRACE RAIL/TOP RAIL		MIN. 1 3/8" DIA. (SEE NOTE NO. 5)
RAIL END		GALVANIZED PRESSED STEEL OR GALVANIZED MALLEABLE FERROUS ALLOY MIN. 3/8" THICKNESS ON BACK BOLTING APPENDAGE
BRACE END		GALVANIZED PRESSED STEEL OR GALVANIZED MALLEABLE FERROUS ALLOY MIN. 3/8" THICKNESS ON BACK BOLTING APPENDAGE
TRUSS ROD TIGHTENER		CLASS 1 - MIN. 3/8" FORMED GALVANIZED STEEL CLASS 2 - MIN. 1/4" FORMED GALVANIZED STEEL
TRUSS ROD		3/8" GALVANIZED, NC TREADED ROD, LOCK WASHER, & FLAT WASHER WITH TWO 90° BENDS OPPOSITE OF TREADED END
TOP RAIL SLEEVE		GALVANIZED STEEL, NOT TO BE USED ON R/W FENCES, MUST MEET REQUIRED PIPE THICKNESSES
TENSION BAR		CLASS 1 - MIN. 1/8" x 3/4" GALVANIZED STEEL CLASS 2 - MIN. 1/8" x 5/16" GALVANIZED STEEL
FENCE FABRIC		2" GALVANIZED DIAMOND MESH STEEL FABRIC, (SEE NOTE NO. 5)
TIE WIRES		MIN. 9 GAGE ALUMINUM WITH ONE HOOKED END
COIL TENSION WIRE		MIN. 7 GAGE. (SEE NOTE NO. 5)
GATE FORK LATCH		MIN. 1/8" GALVANIZED PRESSED STEEL OR MALLEABLE FERROUS ALLOY. (1) LATCH PER EACH SINGLE GATE WITH BENT MIN. 3/8" DIA. ATTACHMENT BOLT, WASHER & NUT.

HARDWARE ITEM DESCRIPTION (CON'T.)		STANDARD REQUIREMENTS
HEAVY GATE HINGE		MIN. 1/8" GALVANIZED PRESSED STEEL WITH (2) 3/8" U-BOLTS, LOCK WASHER & NUTS PER HINGE. USE (2) HINGES PER GATE LEAF UP TO 8' IN WIDTH AND (3) HINGES PER GATE LEAF WIDTHS GREATER THAN 8' (THESE HINGES ARE RECOMMENDED FOR MAINTENANCE & COMMERCIAL INSTALLATIONS).
RESIDENTIAL GATE HINGE		MIN. 1/8" GALVANIZED PRESSED STEEL WITH 3/8" DIA. x 3" CARRIAGE BOLTS, LOCK WASHER & NUTS PER HINGE. USE (2) HINGES PER GATE LEAF UP TO 6' IN HEIGHT AND (3) HINGES PER GATE LEAF HEIGHTS GREATER THAN 6'.
INDUSTRIAL DROP ROD FORK & GUIDE		MIN. 1/8" GALVANIZED PRESSED STEEL. DROP ROD GUIDE INCLUDES 3/8" x 3" CARRIAGE BOLT WITH LOCK WASHER & NUT. DROP ROD FORK IS TO BE WELDED TO ROD & PAINTED WITH AN APPROVED ZINC RICH PAINT.
BARBED WIRE & 3-WIRE BARBARM		BARBED WIRE: 14 GAGE SPACED GALVANIZED MEDIUM CARBON STEEL WIRE WITH BARBS SPACED AT 5" C. to C. GALVANIZING SHALL CONFORM TO APPLICABLE A.S.T.M. DES. A-121-66 FOR ZINC-COATED & AASHTO M 280 SPECIFICATIONS.  3-WIRE BARBARM: BARBWIRE ARM (ONE PIECE "Z" CUT) FITS 1 5/8" O.D. POST, 1 5/8" TOP RAIL" FITS 2" O.D. POST, 1 5/8" TOP RAIL" FITS 2 1/2" O.D. POST, 1 5/8" TOP RAIL" FITS 3" O.D. POST, 1 5/8" TOP RAIL"

FENCE GROUNDING TABLE			
kV	* GROUNDING INTERVAL	FENCE DISTANCE FROM TRANSMISSION ⅈ	FENCE TYPE
500	200'	<100'	4
500	500'	100' - 200'	4
345	400'	<100'	4
345	1000'	100' - 150'	4
>230	500'	50' - 100'	4
100-230	120'	WITHIN R/W	4
<100	NONE	WITHIN R/W	4
* FENCE SECTIONS THAT ARE LESS IN LENGTH THAN THE GROUNDING INTERVAL SHALL BE GROUNDED ONCE.			

- THE MINIMUM FENCE HEIGHT IS 8' WHEN INSTALLING SECURITY FENCING USING THE 3-WIRE BARBARM & BARBED WIRE. (NOTE: THE 3-WIRE BARBARMS ARE NOT DESIGNED FOR RAZOR WIRE). ALL SECURITY FENCES USING THE 3-WIRE BARBARM SHALL HAVE A TOP RAIL.
- ALL CHAIN LINK GATE HARDWARE SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- A TOP RAIL MAY BE USED ON CHAIN LINK FENCES CONSTRUCTED OUTSIDE OF THE HIGHWAY RIGHT-OF-WAY. THE TOP RAIL SHALL BE INCIDENTAL TO THE COST OF THE FENCE.
- LATH USED FOR VISUAL SCREENING, CANTILEVER/ROLLER GATES, SHALL BE SPECIAL ITEM(S) AS SET FORTH IN THE PLANS AND SPECIAL PROVISIONS.
- ALL CHAIN LINK FENCES SHALL BE GROUNDED ACCORDING TO THE FENCE GROUNDING TABLE AND THE METHOD SHOWN ON THE TYPE 4 FENCE DETAIL. ALL CHAIN LINK GATES SHALL HAVE A FLEXIBLE GROUNDING CABLE ATTACHED FROM THE GATE FABRIC TO THE FENCE FABRIC ON THE HINGE SIDE OF THE GATE.
- ALL DETAILS SHOWN ARE NOT TO ANY SCALE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
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3	1-04	MSM						
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DRWG. ORIG. DATE: DECEMBER, 1993	

IDAHO TRANSPORTATION DEPARTMENT	
BOISE IDAHO	



Assistant Chief Engineer (Development)	
Chief Engineer	

STANDARD DRAWING	
CHAIN LINK FENCE FENCE TYPE 4	
REQUIRES SHEET 1 OF 2	

English	
STANDARD DRWG. NO.	
F-2-D	
SHEET 2 OF 2	

